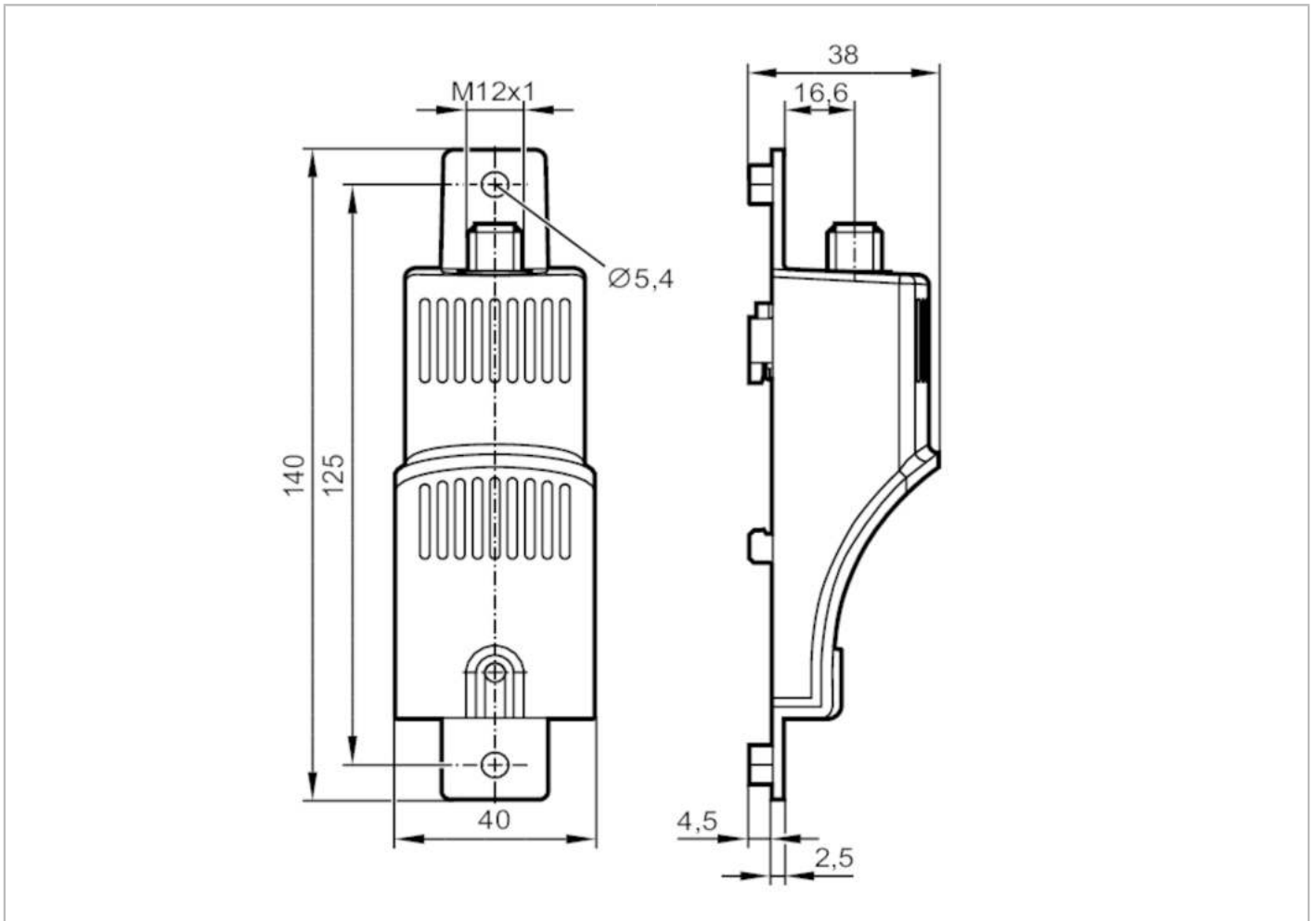


# LDH290



## Air humidity sensor

AIR HUMIDITY SENSOR ANALOG



Product characteristics	
Number of inputs and outputs	Number of analogue outputs: 2
Application	
Special feature	Gold-plated contacts
Electrical data	
Operating voltage [V]	12...30 DC
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	< 1
Measuring principle	capacitive
Inputs / outputs	
Number of inputs and outputs	Number of analogue outputs: 2
Outputs	
Total number of outputs	2
Output signal	analogue signal
Number of analogue outputs	2
Analogue current output [mA]	4...20

# LDH290



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Max. load	[ $\Omega$ ]	( $U_b - 12$ V) / 20 mA
<b>Measuring/setting range</b>		
Measuring range	[% RH]	0...100
Temperature measurement		
Measuring range	[ $^{\circ}$ C]	-40...60
<b>Accuracy / deviations</b>		
Accuracy	[% RH]	4; (in the range 20...80 % RH)
Resolution	[% RH]	0,1
Temperature measurement		
Accuracy	[K]	$\pm 1$
Resolution	[K]	0.1
<b>Response times</b>		
Response time	[s]	< 30; (T90)
Temperature measurement		
Response time	[s]	< 300; (T90)
<b>Operating conditions</b>		
Ambient temperature	[ $^{\circ}$ C]	-40...70
Note on ambient temperature		application humidity: $\leq 90$ % RH non condensing
Storage temperature	[ $^{\circ}$ C]	-40...85
Note on storage temperature		storage humidity: $\leq 90$ % RH non condensing
Protection		IP 20; (only sensor: IP 57)
<b>Tests / approvals</b>		
EMC		DIN EN 61000-6-2 DIN EN 61000-6-3
MTTF	[years]	178
UL approval		File number UL E224228
<b>Mechanical data</b>		
Weight	[g]	72.3
Type of mounting		DIN rail clip for 35 mm DIN rail (EN 60715); screw mounting; (M5)
Dimensions	[mm]	140 x 40 x 38
Materials		plastics UL94 V-0; light grey
Installation position		vertical; connector facing upwards
<b>Remarks</b>		
Pack quantity		1 pcs.

# LDH290

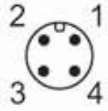


## Air humidity sensor

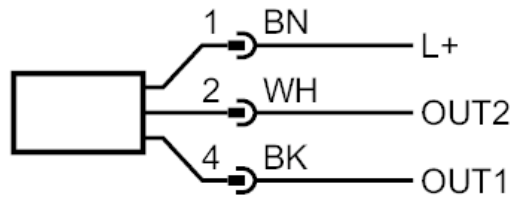
AIR HUMIDITY SENSOR ANALOG

### Electrical connection

Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: gold-plated



### Connection



OUT1: analogue output temperature  
OUT2: analogue output air humidity

colours to DIN EN 60947-5-2

Core colours :

BK = black  
BN = brown  
WH = white